

## REMARKS

The Office Action dated April 11, 2007 has been received and carefully noted. The above amendments to the specification and claims, and the following remarks, are submitted as a full and complete response thereto.

A terminal disclaimer is attached. The specification is amended to correct informalities. Claims 1, 6-7, 10-14, 16, and 17, are amended to more particularly point out and distinctly claim the subject matter of the present invention and to correct informalities. The second claim 3 is cancelled without disclaimer or prejudice, the subject matter of which is added in new claim 19. New claim 20 is added. No new matter is added. Claims 1-20 are respectfully submitted for consideration.

The Office Action objected to the specification because the embodiment recited in claim 17 is not described in the detailed description. Applicants submit that paragraph [0020] of the present specification is amended to replace "Fig. 5" with "Fig. 6". Further, Applicants submit that each of the features recited in method claim 17 are described in the specification at least in paragraphs [0016] – [0021] of the specification which describe the flow diagram of Fig. 6. Accordingly, withdrawal of the objection to the specification is respectfully requested.

The Office Action objected to claims 3 and 8 because of informalities. Specifically, there appear to be two claims "3s" and it is also unclear from which claim 3, claim 8 depends. Applicants submit that the second claim 3 is cancelled and rewritten as

new claim 19. Accordingly, withdrawal of the objection to the claims is respectfully requested.

The Office Action rejected claims 1, 2, 3, 5, 6, 7, 8, 9, 11 and 12 under 35 U.S.C. 103(a) as being obvious over JP 404242106A to Usui (Usui), in view of US Patent No. 6,377,700 to Mack et al. (Mack), in further view of US Patent No. 5,872,834 to Teitelbaum, and further in view of US Patent No. 5,293,452 to Picone et al. (Picone). The Office Action asserted that Usui disclosed all of the features of these claims except at least one camera adapted to record at least two still images of the user from the at least first and second angles of view (which is allegedly disclosed by Mack), a mobile hand held terminal and a processing means for granting access to the user when the generated model matches the profile information of one of the authorized users stored in the memory means, thereby indicating recognition and authorization of the user (which are allegedly disclosed by Teitelbaum), and a means for updating the profile information (which is allegedly disclosed by Picone). Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in any of the pending claims.

Claim 1, from which claims 2-12 and 19 depend, is directed to a mobile hand held terminal, the mobile terminal. At least one camera is directed toward the user's face and configured to record at least two still image of the user from at least first and second angles of view. A memory unit is configured to store user profile information relating to authorized users of a system. A processing unit is connected to the at least one camera, is

configured to process the still images obtained by the at least one camera and to generate a 3-dimensional model of the user's face. The processing unit is further configured to compare the generated model with the stored user profile information to determine whether the user is authorized to access a system. The processing unit includes an access unit configured to grant access to the system when the generated model matches the profile information of one of the authorized users stored in the memory unit, thereby indicating recognition and authorization of the user. An updating unit is configured to update the profile information of the one of the authorized users with the generated model after each grant of access by the access unit such that the updated profile information comprises an average of the generated model and the previously stored profile information.

Applicants submit that each of the above claims recite features that are neither disclosed nor suggested in any of the cited references.

Usui is directed to a face recognizing apparatus. The image is picked up with a three-dimensional shape measuring device 11. Figure 2 illustrates cameras facing an image of a face. One camera 112 is connected to A/D 113. The second camera 115 is not connected to anything.

Mack is directed to the capture of stereoscopic images. Mack further describes creating three-dimensional (3-D) models of real objects, a multitude of images of real objects are taken from different positions to exploit the differences of the object's

projections. See col. 2 lines 40-47 of Mack. The two or more images (stereoscopic images) are used to process into 3-D models.

Teitelbaum is directed to a telephone with a biometric sensor. The biometric signal derived therefrom, is used to identify an individual using certain telephone equipment. As discussed above, Teitelbaum is used in the Office Action to disclosed a mobile hand-held terminal for recognizing a user's identity during an attempt to access the mobile equipment, and a processing means for comparing the generated model with profile information, to determine if the user is authorized to access a system and for granting access to the system if this is the case.

Picone is directed to voice log-in using spoken name input. As discussed above, the Office Action relied on Picone to disclose means for updating the profile information of the one of the authorized users with the generated model after each grant of access by said means for granting access such that the updated profile information comprises an average of the generated model and the previously stored profile information.

Applicants respectfully submit that the cited references fail to disclose or suggest at least the feature of "a memory unit configured to store user profile information relating to authorized users of a system," as recited in claim 1. As discussed above, the Office Action asserted that this feature is disclosed in Usui in Fig. 2, as a database that stores registered data. However, as discussed above there is no indication in Usui that the "registered data" is in fact user profile information.

Further, Applicants submit that the cited references fail to disclose or suggest at least the feature of “a processing unit connected to said at least one camera” . . . , as recited in claim 1. The Office Action relied on Usui to disclose this feature and asserted that 13 of Fig. 1 is a processing means for processing the still images obtained by the camera. Applicants submit that there are two problems with this assertion. First, none of the figures in Usui shows that the processing means (13) is connected to the cameras 112 and 115. Second, the translated portion of Usui does not indicate that the reference number 13, processes the still images. Thus, the Office Action fails to show where the above mentioned features are disclosed or suggested in Usui. Further, Applicants submit that these features are not inherent in Usui. Applicants further submit that none of Mack, Teitelbaum, or Picone cures these deficiencies.

Further, Applicants submit that the Office Action is using piecemeal analysis to reconstruct the presently claimed invention.

It is well established in US Patent law that a piecemeal analysis of a number of references, to extract a number of individual elements which are picked and chosen to recreate the claimed invention, is improper absent some teaching or suggestion in the references to support their use in the particular claimed combination. It is improper to use applicant's own disclosure for any such motivation or incentive. Interconnect Planning Corporation v. Feil, 227 USPQ 543 (Fed. Cir. 1985), Symbol Technologies Inc. v. Opticon, Inc., 19 USPQ 1241 (Fed. Cir. 1991), In re Rothermel and Waddell, 125 USPQ 328 (CCPA 1960), In re Jones, 21 USPQ 2d 1941 (Fed. Cir. 1992).

In the present case, as discussed above, the Office Action is picking elements out of four different references to recreate the presently claimed invention. This piecemeal nature to the above rejection is further evidenced when one considers that Teitelbaum (directed to “Telephone with Biometric Sensing Device), and Picone (directed to speech recognition) are directed references that are unrelated and otherwise, non-analogous to Usui and Mack, as well as, the present invention. Thus, one skilled in the art would not be motivated to combine the teachings of the above four references, without use of improper hindsight reasoning.

Applicants submit that because claims 2, 3, 5, 6, 7, 8, 9, 11, and 12 depend from claim 1, these claims are allowable at least for the same reasons as claim 1, as well as for the additional features recited in these dependent claims.

Based at least on the above, Applicants submit that the cited references fail to disclose or suggest all of the features recited in claims 1, 2, 3, 5, 6, 7, 8, 9, 11 and 12. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested.

The Office Action rejected claims 4, 13, 14, 15 and 19 (second claim 3) under 35 U.S.C. 103(a) as being obvious over Usui, Mack, Teitelbaum and Picone, and further in view of US Patent No. 5,497,430 to Sadovnik (Sadovnik). The Office Action took the position that Usui, Mack, Teitelbaum and Picone disclosed all of the features of these claims except that the camera is a charged-coupled device (CCD) camera. The Office Action asserted that Sadovnik disclosed this feature. Applicants submit that the cited

references fail to disclose or suggest all of the features recited in any of the pending claims. Specifically, Usui, Mack, Teitelbaum and Picone are deficient at least for the reasons discussed above and Sadovnik fails to cure these deficiencies.

Usui, Mack, Teitelbaum and Picone are discussed above. Sadovnik is directed to operating an image recognition system including providing a neural network including a plurality of input neurons. However, Applicants submit that Sadovnik fails to cure the deficiencies discussed above regarding claim 1.

Further, Applicants reiterate the Office Action's use of piecemeal analysis because as a result of the present rejection, the Office Action has applied five references in an effort to reconstruct Applicants' presently claimed invention.

Based at least on the above, Applicants submit that the cited references fail to disclose or suggest all of the features recited in claims 4, 13, 14, 15 and 19. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested.

The Office Action rejected claim 1 under the doctrine of non-statutory, obviousness-type double patenting as being unpatentable over claim 12 of US Patent No. 6,775,397 ('397). The Office Action asserted that while the conflicting claims are not identical, they are not patentably distinct.

As discussed above, a terminal disclaimer is attached to obviate the above mentioned double-patenting rejection. Accordingly, withdrawal of the obviousness-type double patenting rejection is respectfully requested.

As stated above, new claims 19 and 20 are added. Applicants submit that the subject matter of claim 19 is the same as the second claim 3 which is cancelled. Further, claim 20 recites features that are neither disclosed nor suggested in any of the cited references.

Applicants submit that each of claims 1-20 recites features that are neither disclosed nor suggested in any of the cited references. Accordingly, it is respectfully requested that each of claims 1-20 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosure: Additional Claim Fee Transmittal  
Submission of Terminal Disclaimer  
Check No. 16696